

PATENT APPLICATION TRANSMITTAL LETTER
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Mailed Nov. 25, 1999

Commissioner of Patents and Trademarks
Washington, District of Columbia 20231

Sir:

Please file the following enclosed design patent/utility patent application papers:

Applicant #1, Name: CHIANG, Ming-Huang

Applicant #2, Name: _____

Title: STRUCTURE OF A COMPUTER HOUSING

(V) Specification, Claims, and Abstract: Nr. Of Sheets (in triplicate): 11

(V) Declaration: Date signed: November 15, 1999

(V) Drawing(s): Nr. of Sheets Enc. (in triplicate): Formal: 8

(V) Small Entity Declaration of Inventor(s)

(V) SED of Non-Inventor/Assignee/Licensee

() Assignment; please record and return; recordal fee enclosed.

(V) Check for \$ 380.00 for:

(V) \$ 380.00 for filing fees (not more than three independent claims and twenty total claims are presented).

() \$40.00 Additional if Assignment is enclosed for recordal.

(V) Return Receipt Postcard Addressed to Applicant #1.

Very respectfully,

Chiang Ming Huang

Applicant #1 signature

PO BOX 82-144, TAIPEI TAIWAN

Applicant #2 Signature

Address (Send Correspondence Here)

Express Mail label # _____ ; Date of Deposit

I hereby certify that this paper or fee is being deposited with the United States Postal Service using "Express Mail Post Office To Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to "Commissioner of Patents and Trademarks, Washington, D.C. 20231."

Signed

Chiang Ming Huang
Inventor(s)

CHIANG, Ming-Huang

11/30/99
JC580 U.S. PTO

JC690 U.S. PTO
09/450417
11/30/99

Independent Inventor

Attorney's
Docket No. _____

VERIFIED STATEMENT OF SMALL ENTITY STATUS

Honorable Commissioner of Patents and Trademarks
Washington, D. C. 20231

Sir:

I hereby declare that I am ☒ the sole inventor ☐ a joint inventor of the
invention entitled: STRUCTURE OF A COMPUTER HOUSING

the invention being described and claimed ☒ in the specification filed herewith, ☐ in the
specification of application Serial No. _____, filed _____
19____; and that I have not assigned, granted, conveyed, or licensed, and that I am under
no obligation under contract or law to assign, grant, convey, or license, any rights in the
invention to any person who could not likewise be classified as an independent inventor if
that person had made the invention, or to any concern which would not qualify as a small
business concern or a nonprofit organization.

I further declare that all statements made herein of my own knowledge are
true and that all statements made on information and belief are believed to be true; and
further that these statements were made with the knowledge that willful false statements and
the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title
18 of the United States Code, and that such willful false statements may jeopardize the
validity of the application or any patent issuing thereon.

Date: November 15, 1999

Chiang, Ming-Huang
CHIANG, Ming-Huang

TITLE: STRUCTURE OF A COMPUTER HOUSING**BACKGROUND OF THE INVENTION****(a) Field of the Invention**

The present invention relates to computer housing, and in particular, a
5 computer housing having a front side board, a rear side board, a top side board,
a bottom side boards, etc being pivotally hinged with other at the adjacent
edges of the boards, thereby, a comparative smaller space is required during
shipping of the housing and the housing facilitates maintenance of the
computer.

10 (b) Description of the Prior Art

Referring to Fig. 1, there is shown a conventional computer housing
comprising a front side board 10, a rear side board 11, a covering plate 12 and
a base plate 13. The front side plate 10 is provided with a plurality of slots
100 to mount with a securing plate so as to mount an optical disc, a hard disc
15 and a soft disc. A through hole 110 is provided on the rear side board 11 and
is associated with a holding plate to hold a power supply. The covering plate
is substantially an inverted "U" shaped and a protruded disc plate 120,
bending inward, being provided at the bottom section of the two sides. The
base plate 13 is a rectangular shape disc-like member.

20 In order to assemble the essential parts of a computer, these parts, such as

the optical disc, hard disc and the soft disc are respectively mounted at the front side board 10 and the rear side board 11 or in between, and the bottom side of the front side board 10 and the rear side board 11 are mounted at the two side edges of the base plate 13, Then, the opening of the covering plate 12 is opened and the and the rear side board 11 is pushed forward to the front side board 10 until it is all covered. Finally, screws are used to mount the two sides of the base plate 13 at the protruded plate 120 of the covering plate 12.

Such computer housing has the following drawbacks in assemble and in use:

- 10 (a) The volume of the housing is large and the transportation cost is high:
As the computer housing has a covering plate 12 and is substantially inverted “U” shaped, therefore, the computer housing occupies a larger space and the cost of transportation is increased.
- 15 (b) Assembly and maintenance of the computer are not easy. The entire housing has to be placed downward and to detach the base plate 13 and the covering plate 12 in order to access to the interior of the computer.

SUMMARY OF THE INVENTION

One aspect of the present invention is to provide an improved structure of a computer housing comprising a front side board, a rear side board, a top side board, a bottom side board, a left side board, and a right side board, characterized in that a plurality of pivot members are hingedly disposed along the edges of the respective side boards, and the side boards are arranged adjacent to other side boards, a plurality of securing seat plates are provided on the front side board for the mounting of an optical disc, a hard disc and soft disc, a holding seat plate is disposed on the rear side board for the mounting of a power source supply , and a plurality of the pivot members are formed along the edges of the front side board and a rear side board, such that the computer housing can be spread out on as a flat plan before forming into a box-like casing.

It is an object of the present invention to provide an improved structure of a computer housing, wherein the computer housing does not occupy space and therefore it facilitates space for transportation and shipping, and the cost of transportation is thus greatly minimized.

Yet another object of the present invention is to provide an improved structure of a computer housing, wherein the assembly of the computer housing is easy, and the maintenance of the computer is convenient.

[illegible]

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is an exploded view of a conventional computer housing.

Fig. 2 is a perspective exploded view of a computer housing in accordance with the present invention.

5 Fig. 3 is a perspective view showing the folding of the side boards of a computer housing in accordance with the present invention.

Fig. 4 is a perspective view showing an application of a computer housing in accordance with the present invention.

10 Fig. 5 is a perspective view showing the mounting of the securing seat plates of a computer housing in accordance with the present invention.

Figs. 6A and 6B illustrate assemble of the holding seat plates onto a side board of a computer housing in accordance with the present invention.

Figs. 7A and 7B illustrate the mounting of a power source supply onto the computer housing in accordance with the present invention.

15 Fig. 8 shows a comparison between of the present computer housing with that of a conventional computer housing.

DETAILED DESCRIPTION OF THE INVENTION

Referring to Figs. 2, 3, 4, 5, 6A, 6B, 7A and 7B, there is shown an improved structure of a computer housing comprising a front side board 20, a rear side board 21, a top side board 22, a bottom side board 23, a left side board 24, a right side board 25. A plurality of pivot members 30 are hingedly disposed along the edges of the respective side boards. The side boards have one edge adjacent to other side boards, and a plurality of securing seat plates 40 are provided at the front side board 20 for the mounting of an optical disc, a hard disc and soft disc, as shown in Fig. 5. On the rear side board 21, an opening 210 is provided and the lateral side of the opening 210 is provided with a plurality of pivot members 30. A holding seat plate 41, including a vertical plate and a horizontal plate, is formed into an L-shaped member, wherein the lower edge of the vertical plate is provided with a plurality of engaging slots 410. One side edge of the horizontal plate is provided with a plurality of protruded disc 411 such that the vertical plate is connected to the horizontal plate to form the L-shaped member via the engagement of the protruded disc 411 with the engaging slot 410. The L-shaped member is used to hold a power source supply 50, which is shown in Figs. 6A and 6B. The four corners of the top and bottom side of the power source supply 50 are each provided with an engaging rod 51 and the end

portion of the engaging rod 51 is provided with a flexible engaging member 52, which can engage at the edge of the opening 210 of the rear side board 21. Thus, this structure allows an effective function in disassembly of the power source supply 50, as shown in Figs. 7A and 7B.

- 5 In accordance with the present invention, the pivot members 30 are hinge structure and a plurality of screws are used to mount the hinge structure onto the side boards at the edges thereof or by welding the hinge structure onto the side board at the edges thereof.

Accordingly, the advantages of the present inventions are as follows:

- 10 (a) The space occupied by the computer housing is small and the cost of shipping or transportation cost is thus minimized. In accordance with the present invention, the structure of the computer housing can be stacked on each other as the housing can be spread out substantially as a flat surface. Thus, the total numbers of the computer housing can be increased for each
15 shipment and the cost of transportation is reduced (as shown in Fig. 8)
- (b) Easy assemble and maintenance.

When assembling the computer housing, the front side board 20, the rear side board 21, the top side board 22, the bottom side board 23, the right side board 25, are folded and a plurality of screws are used to mount the
20 connection edges of the side boards. Accordingly, when assembly, the

required screws for connection are limited and the assembly of the side boards are easy and simple. Additionally, if the computer needs maintenance, the screws at the right side board 25 are unloaded and the right side board 25 is then opened. Thus, the damage parts within the computer housing are easily accessible for maintenance.

Although the invention has been explained in relation to its preferred embodiment, it is to be understood that many other possible modifications and variations can be made without departing from the spirit and scope of the invention as hereinafter claimed.

I CLAIM:

1. An improved structure of a computer housing comprising a front side
board, a rear side board, a top side board, a bottom side board, a left side
board, and a right side board, characterized in that a plurality of pivot
5 members are hingedly disposed along the edges of the respective side
boards, and the side boards are arranged adjacent to other side boards, a
plurality of securing seat plates are provided on the front side board for the
mounting of an optical disc, a hard disc and soft disc, a holding seat plate is
disposed on the rear side board for the mounting of a power source supply ,
10 and a plurality of the pivot members are formed along the edges of the
front side board and a rear side board, such that the computer housing can
be spread out on as a flat plan before forming into a box-like casing.
2. An improved structure of a computer housing as set forth in Claim 1,
wherein the housing seat plates including a vertical member and a
15 horizontal member and are arranged in a L-shaped configuration, the lower
edge of the vertical member is provided with a plurality of engaging slots,
and one edge of the horizontal member is provided with a plurality of
protruded disc for mounting together with the engaging slots, and the
holding seat plates hold the power source supply.
- 20 3. An improved structure of a computer housing as set forth in Claim 1,

wherein the pivot members are hinges which can be mounted at the lateral edge of the respective side boards by screwing or by welding.

4. An improved structure of a computer housing as set forth in Claim 1,
wherein the power source supply is provided with an engaging rod at the
5 bottom section of the lateral sides thereof for mounting of the power
supply onto the rear side board.

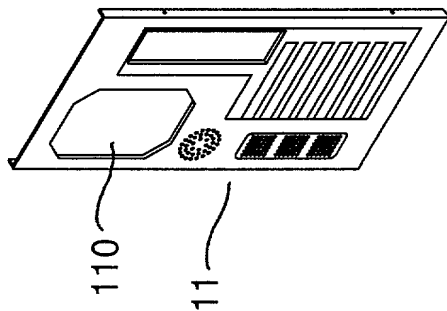
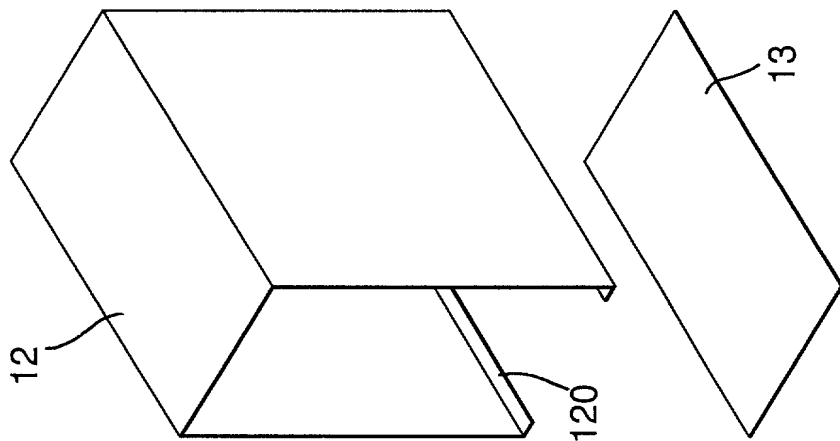
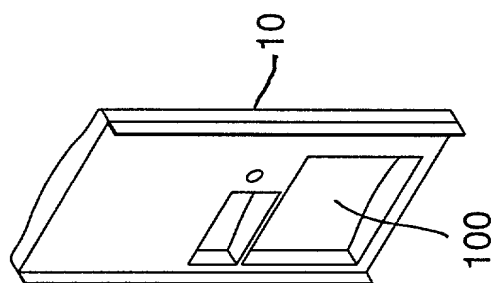
ABSTRACT OF THE DISCLOSURE

An improved structure of a computer housing comprising a front side board, a rear side board, a top side board, a bottom side board, a left side board, and a right side board, characterized in that a plurality of pivot members are

5 hingedly disposed along the edges of the respective side boards, the side boards having one edge adjacent to other side boards, a plurality of securing seat plates are provided on the front side board for the mounting of a optical disc, a hard disc and soft disc, a holding seat plate is disposed on the rear side board for the mounting of a power source supply , and a plurality of the pivot

10 members are formed along one edge of the front side board and a rear side board such that the computer housing can be spread out on as a flat plan.

The present computer housing requires a small space for transportation and therefore the cost of transportation is greatly saved. In addition, the present invention provides a convenient installation and maintenance.



PRIOR ART
FIG. 1

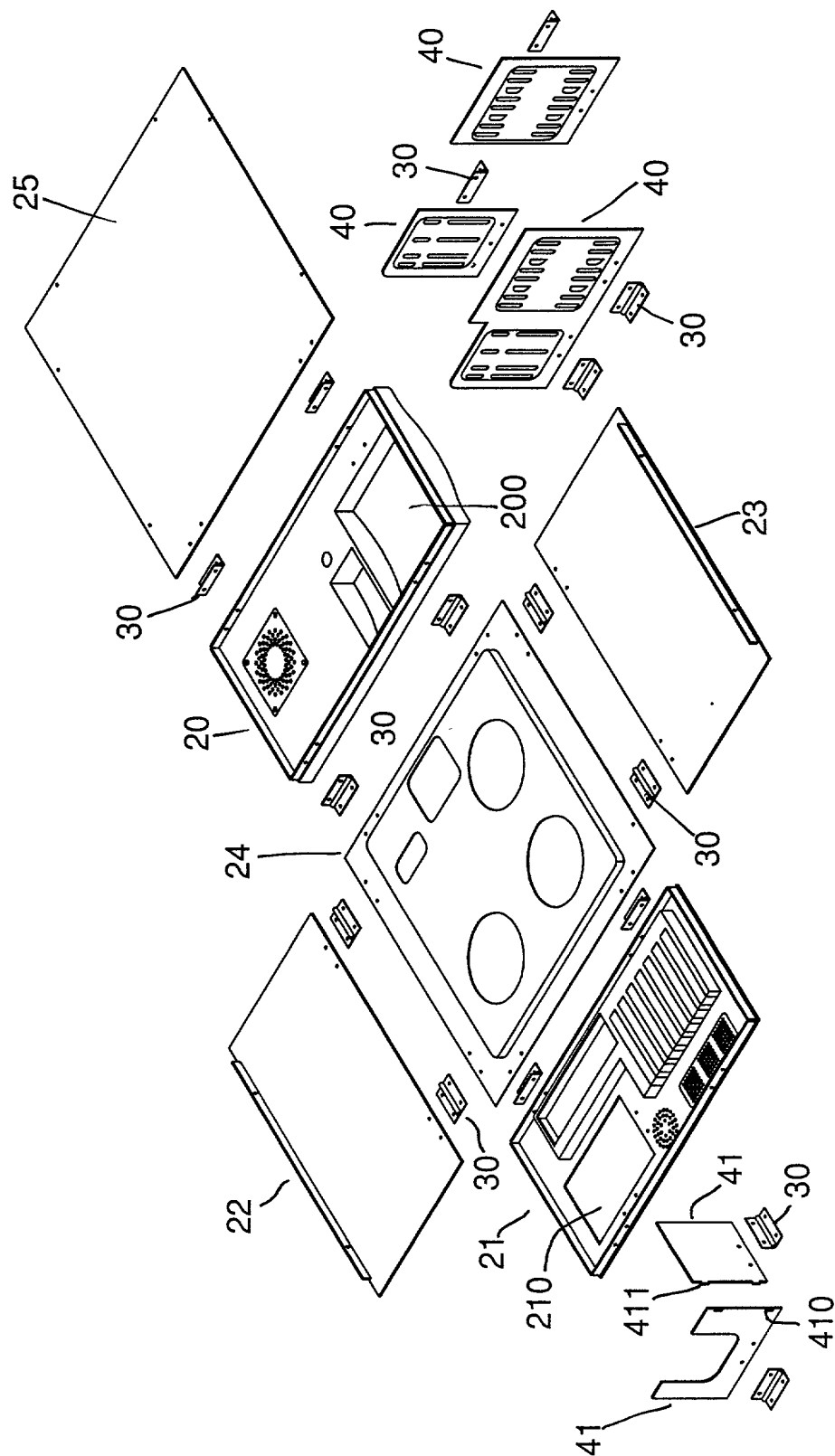


FIG. 2

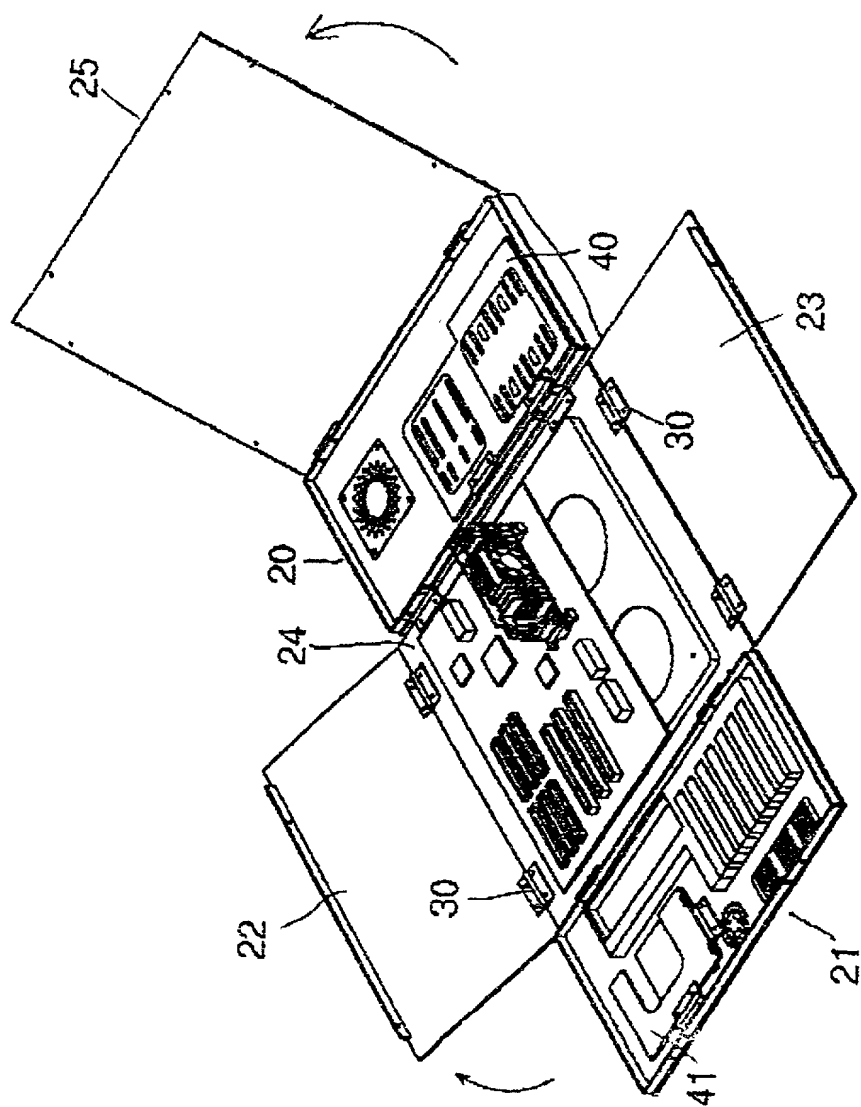


FIG. 3

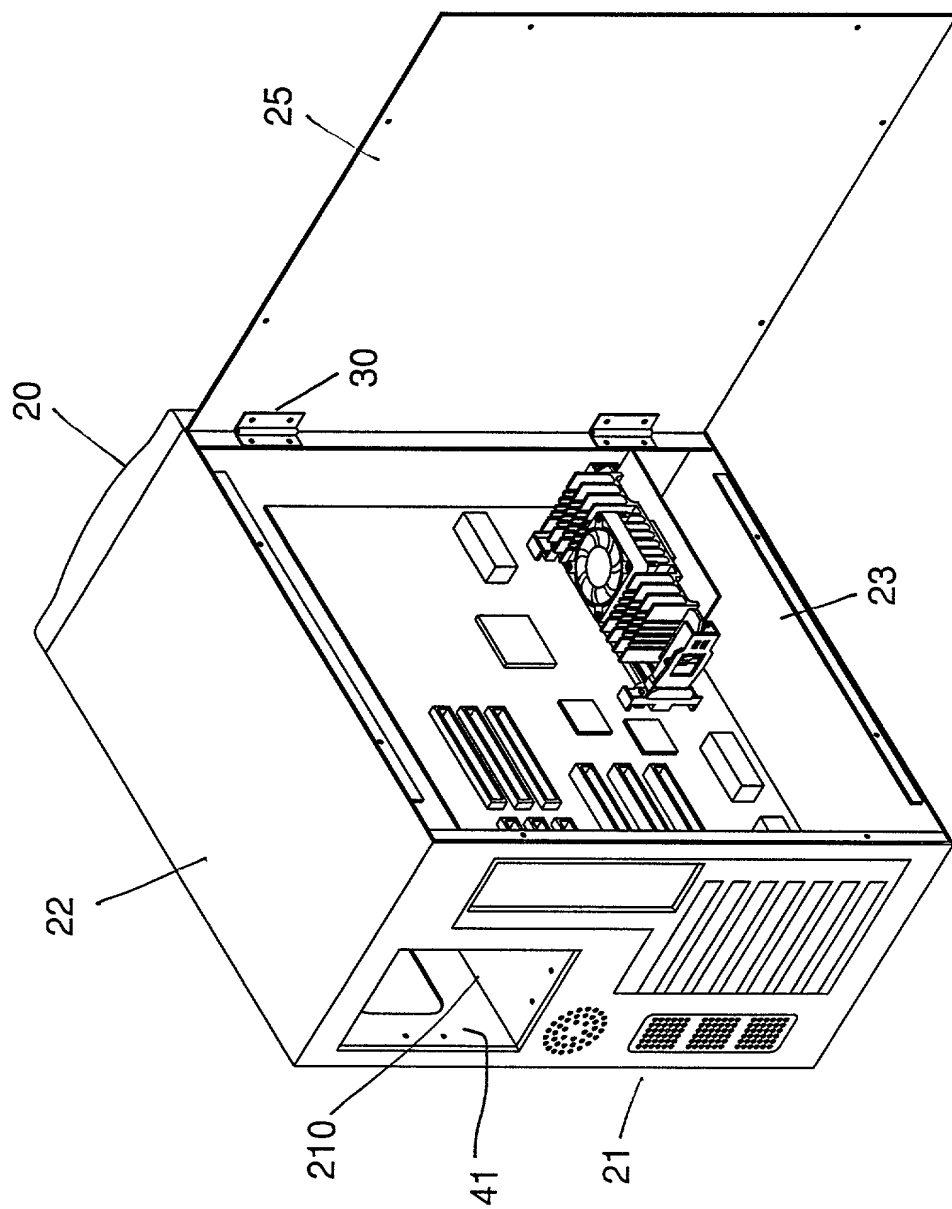


FIG. 4

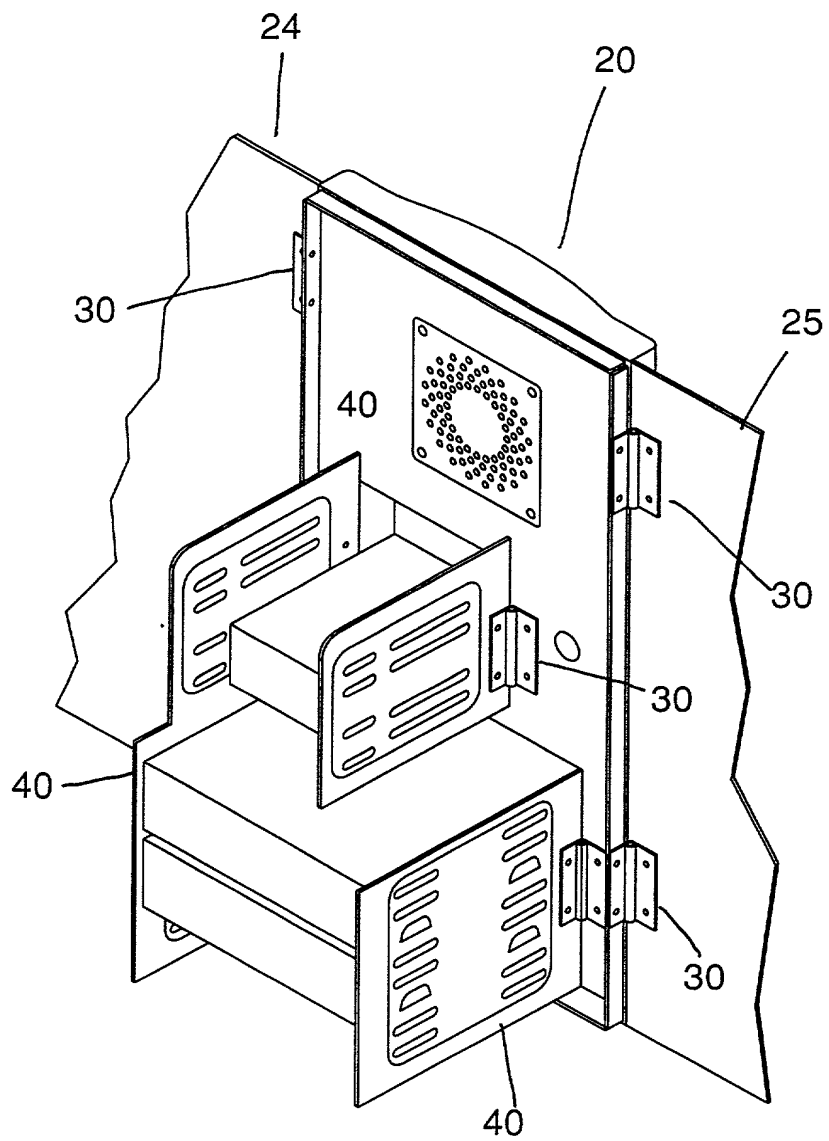


FIG. 5

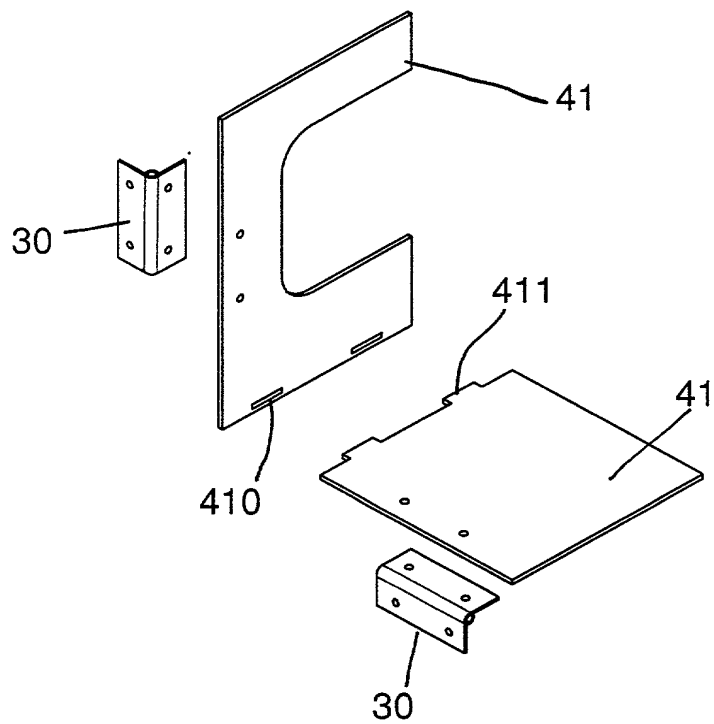


FIG. 6 A

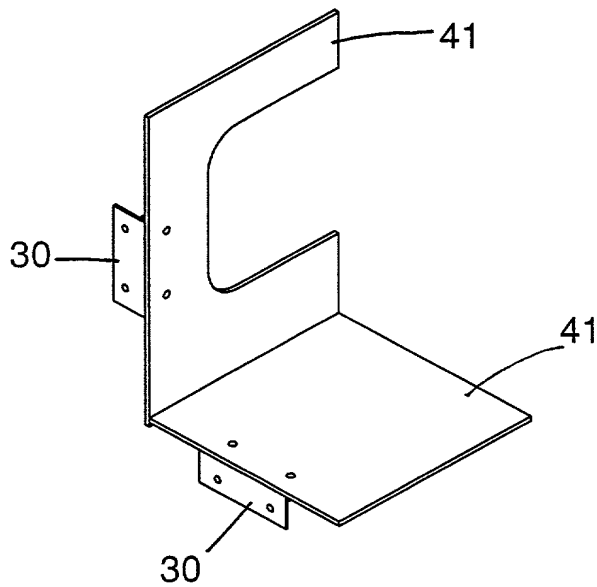


FIG. 6B

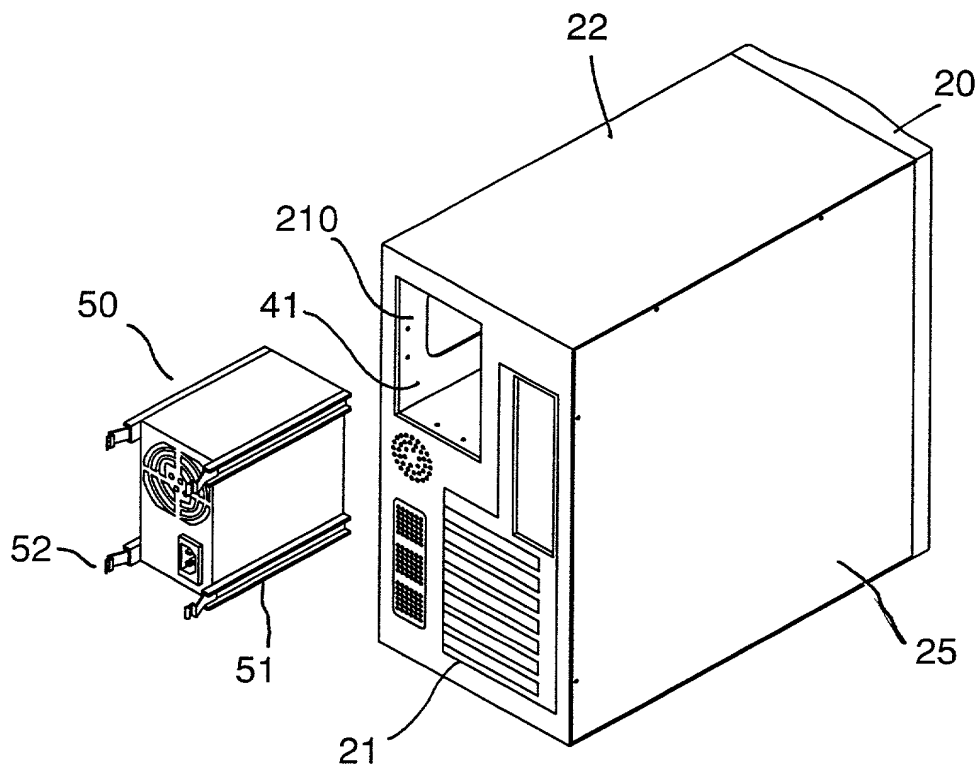


FIG. 7A

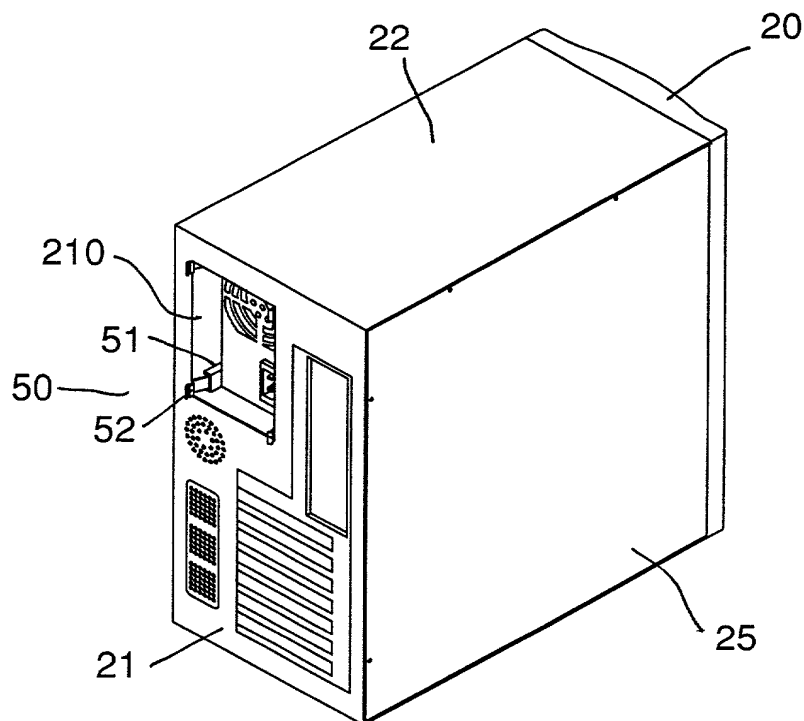


FIG. 7B

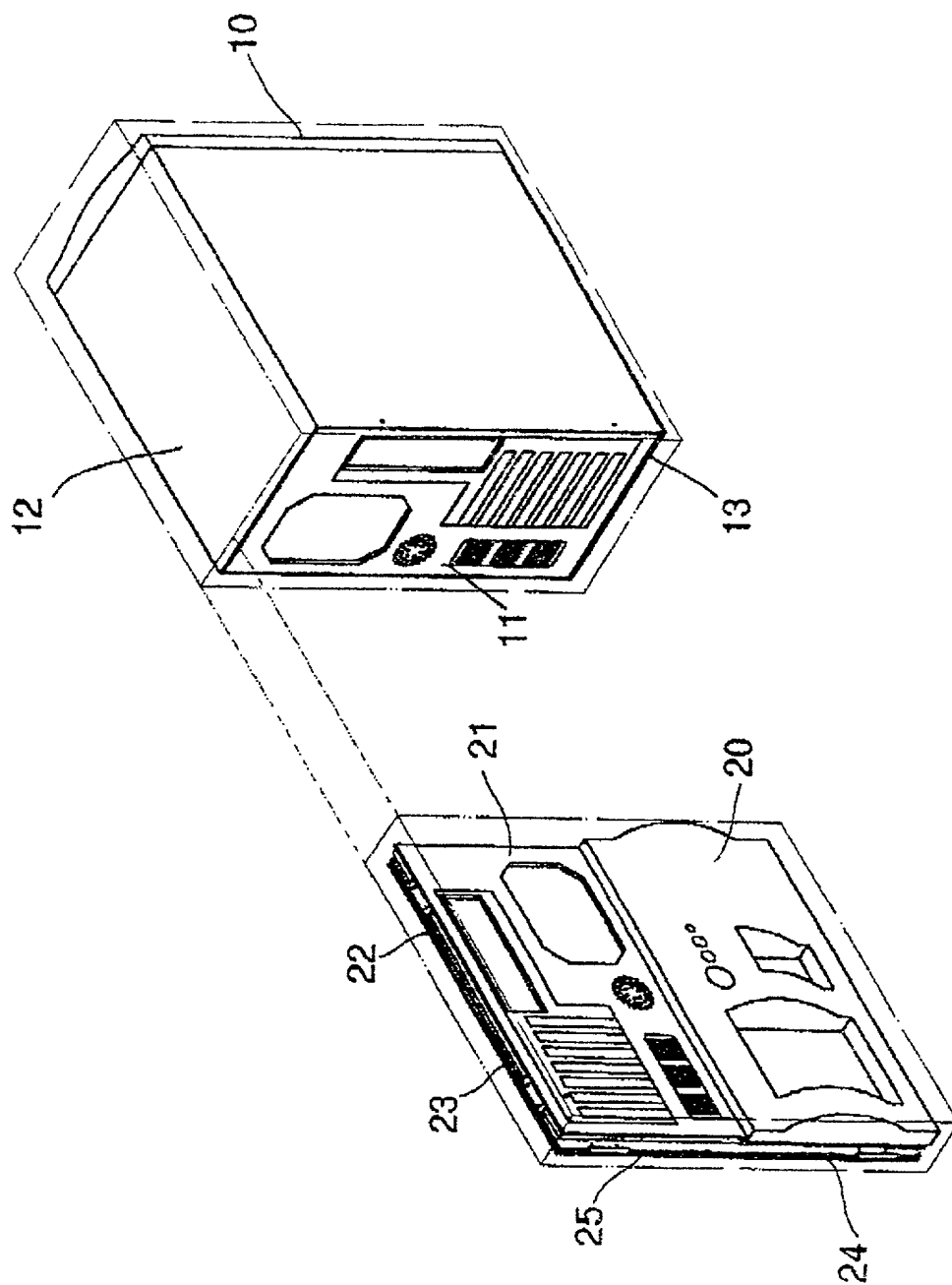


FIG. 8

Declaration For Patent Application

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor(if only one name is listed below) or an original, first and joint inventor(if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled _____

STRUCTURE OF A COMPUTER HOUSING

the specification of which

(check one) ☒ is attached hereto.

☐ was filed on _____ as

Application Serial No. _____

and was amended on _____

(if applicable)

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claim(s), as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign Application(s)

Priority Claimed

_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____ (Number)	_____ (Country)	_____ (Day/Month/Year Filed)	<input type="checkbox"/> Yes <input type="checkbox"/> No

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

_____ (Application Serial No.)	_____ (Filing Date)	_____ (Status) (patented, pending, abandoned)
_____ (Application Serial No.)	_____ (Filing Date)	_____ (Status) (patented, pending, abandoned)

And I hereby appoint as principal attorneys

Please direct all communications to the following address:

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor CHIANG, Ming-Huang

Inventor's signature Chiang Ming-Huang November 15, 1999

Residence TAIWAN Date

Citizenship TAIWAN

Post Office Address PO BOX 82-144, TAIPEI, TAIWAN

(Supply similar information and signature for second and subsequent joint inventors.)